



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2012-0150; Directorate Identifier 2011-NM-234-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; Airbus Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for all Airbus Model A318 series airplanes, Airbus Model A319 series airplanes, Airbus Model A320 series airplanes, and Airbus Model A321 series airplanes. This proposed AD was prompted by reports of oil residue between the stator and the rotor parts of the position resolvers of the angle of attack (AOA) vane, which was a result of incorrect removal of the machining oil during the manufacturing process of the AOA resolvers. This proposed AD would require inspecting to determine if certain AOA probes are installed, and replacing the affected AOA probe if necessary. We are proposing this AD to prevent erroneous AOA information and consequent delayed or non-activation of the AOA protection systems which, during flight at a high angle of attack, could result in reduced control of the airplane.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: (202) 493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For Airbus service information identified in this proposed AD, contact Airbus, Airworthiness Office – EAS, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; e-mail [account.airworth-eas@airbus.com](mailto:account.airworth-eas@airbus.com); Internet <http://www.airbus.com>. For Thales Avionics service information identified in this proposed AD, contact Thales Avionics, Retrofit Manager, 105, Avenue du Général Eisenhower, BP 63647, 31036 Toulouse Cedex 1, France; telephone +33 5 61 19 76 95; fax +33 5 61 19 68 20; e-mail [retrofit.ata@fr.thalesgroup.com](mailto:retrofit.ata@fr.thalesgroup.com); Internet <http://www.thalesgroup.com/aerospace>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

## **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, Washington 98057-3356; telephone (425) 227-1405; fax (425) 227-1149.

## **SUPPLEMENTARY INFORMATION:**

### **Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2012-0150; Directorate Identifier 2011-NM-234-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will

also post a report summarizing each substantive verbal contact we receive about this proposed AD.

## **Discussion**

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA Airworthiness Directive 2011-0203, dated October 13, 2011 (referred to after this as “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

During Airbus Final Assembly Line flight tests, AoA [angle of attack] data from two different aeroplanes were found inaccurate, which was confirmed by flight data analysis.

Investigation conducted by Airbus and Thales on the removed probes revealed oil residue between the stator and the rotor parts of the AoA vane position resolvers. This oil residue was the result of incorrect removal of machining oil during the manufacturing process of the AoA resolvers. At low temperatures, this oil residue becomes viscous (typically in cruise), causing delayed and/or reduced AoA vane movement. Multiple AOA probes could be simultaneously affected, providing incorrect indications of the AoA of the aeroplane.

This condition, if not corrected, could lead to erroneous AoA information and consequent delayed or non-activation of the AoA protection systems which, during flight at a high angle of attack, could result in reduced control of the aeroplane.

For the reasons described above, this [EASA] AD requires the identification of the serial number (s/n) of each installed Thales Avionics Part Number (P/N) C16291AA AoA probe and the replacement of all suspect units with serviceable ones. This AD also prohibits the (re)installation of these same s/n probes on any aeroplane, unless corrective measures have been accomplished.

You may obtain further information by examining the MCAI in the AD docket.

### **Relevant Service Information**

Airbus has issued Service Bulletin A320-34-1452, including Appendix 01, dated January 29, 2010. Thales Avionics has issued Service Bulletin C16291A-34-007, Revision 01, dated December 3, 2009. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

### **FAA's Determination and Requirements of This Proposed AD**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of the same type design.

### **Costs of Compliance**

Based on the service information, we estimate that this proposed AD would affect about 755 products of U.S. registry. We also estimate that it would take about 2 work-hours per product to comply with the basic requirements of this proposed AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of the proposed AD on U.S. operators to be \$128,350, or \$170 per product.

In addition, we estimate that any necessary follow-on actions would take about 3 work-hours and require parts costing \$0, for a cost of \$255 per product. We have no way of determining the number of products that may need these actions.

### **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

1. Is not a "significant regulatory action" under Executive Order 12866;
2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);

3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

#### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new AD:

**Airbus:** Docket No. FAA-2012-0150; Directorate Identifier 2011-NM-234-AD.

#### **(a) Comments Due Date**

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Airbus Model A318-111, -112, -121, and -122 airplanes; Model A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes; Model A320-111, -211, -212, -214, -231, -232, and -233 airplanes; and Model A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes; certificated in any category; all manufacturer serial numbers.

**(d) Subject**

Air Transport Association (ATA) of America Code 34: Navigation.

**(e) Reason**

This AD was prompted by reports of oil residue between the stator and the rotor parts of the position resolvers of the angle of attack (AOA) vane, which was a result of incorrect removal of the machining oil during the manufacturing process of the AOA resolvers. We are issuing this AD to prevent erroneous AOA information and consequent delayed or non-activation of the AOA protection systems which, during flight at a high angle of attack, could result in reduced control of the airplane.

**(f) Compliance**

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

**(g) Inspection**

Except as provided by paragraph (h) of this AD: Within 12 months after the effective date of this AD, inspect to determine the part number and serial number of each Thales Avionics AOA probe, in accordance with the Accomplishment Instructions of

Airbus Service Bulletin A320-34-1452, excluding Appendix 01, dated January 29, 2010. If any probe is found having part number (P/N) C16291AA and having a serial number listed in Thales Avionics Service Bulletin C16291A-34-007, Revision 01, dated December 3, 2009: Within 12 months after the effective date of this AD, replace the AOA probe, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-34-1452, excluding Appendix 01, dated January 29, 2010. A review of airplane maintenance records is acceptable in lieu of this inspection if the part number and serial number of the installed AOA probes can be conclusively determined from that review.

**(h) Exception**

For any airplane on which Airbus modification 150006 (installation of Thales Avionics AOA probes P/N C16291AB) or modification 26934 (installation of Goodrich AOA probes P/N 0861ED) has been embodied in production and on which no AOA probe replacement has been made since first flight: The actions specified in paragraph (g) of this AD are not required.

**(i) Parts Installation**

As of the effective date of this AD, no person may install a Thales Avionics AOA probe, P/N C16291AA, having a serial number listed in Thales Avionics Service Bulletin C16291A-34-007, Revision 01, dated December 3, 2009, on any airplane, unless that Thales Avionics probe has been inspected, re-identified and tested, in accordance with the Accomplishment Instructions of Thales Avionics Service Bulletin C16291A-34-007, Revision 01, dated December 3, 2009.

**(j) Other FAA AD Provisions**

The following provisions also apply to this AD:

(1) **Alternative Methods of Compliance (AMOCs):** The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, Washington 98057-3356; telephone (425) 227-1405; fax (425) 227-1149. Information may be e-mailed to: [9-ANM-116-AMOC-REQUESTS@faa.gov](mailto:9-ANM-116-AMOC-REQUESTS@faa.gov). Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(2) **Airworthy Product:** For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

**(k) Related Information**

Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2011-0203, dated October 13, 2011; Airbus Service Bulletin A320-34-1452, excluding Appendix 01, dated January 29, 2010; and Thales Avionics Service Bulletin C16291A-34-007, Revision 01, dated December 3, 2009; for related information. Issued in Renton, Washington, on February 6, 2012.

Ali Bahrami,  
Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2012-4209 Filed 02/22/2012 at 8:45 am; Publication Date: 02/23/2012]